

ABSTRACT

An ignition coil for an internal combustion engine minimizes the propagation of cracks in the encapsulate material surrounding the components of the ignition coil and provides a supplemental dielectric barrier. In one embodiment, the ignition coil comprises a housing, an outer core, an inner coil, and a coil assembly. The housing includes a bottom wall connected to an outer wall extending around the periphery of the housing. The outer core is positioned inside the outer wall, while the inner core is positioned inside the outer core. The coil assembly includes a primary winding and a secondary winding concentrically positioned relative to each other. The coil assembly is mounted to the inner core and positioned inside the outer core. The housing further includes an inner wall extending along the inner periphery of the outer core and positioned between the outer core and the coil assembly to prevent propagation of cracks.